

Ref. No. FS 4.1.4-2115-19

# Innovation and utilization of ideas, knowledge and research results

Credit points: 2 ECTS Course code: 5DN009 Established: 2019-11-25

**Established by:** Doctoral Studies Committe **Syllabus valid from:** January 1, 2020

**Responsible Department:** Faculty of Science and Technology

Main field of study: General Science Grading system: G pass, U Fail Level of Education: Doctoral course

## 1. Requirements

This course is eligible for doctoral students that have completed at least 1,5 years of full-time studies at doctoral level.

## 2. Expected learning outcomes

Upon completion of the course, the student should be able to demonstrate:

## Knowledge and understanding

- understanding of concepts such as utilization, innovation, commercialization and licensing.
- understanding of the Swedish conditions for utilizing research results, for example, professors privilege.
- knowledge of the basics of how to protect and utilize intellectual property through entrepreneurship or, for example, licensing to existing companies/organizations.
- knowledge of the academic innovation support system and its resources.

#### Competence and skills

- knowledge of and ability to apply a selection of methods to evaluate the potential of ideas for utilization and/or commercialization.
- skills and ability in terms of idea development related to the participant's own research area.

#### Judgement and approach

- competence to reflect on and use terms such as utilization and innovation.
- competence to reflect on how the UN Global Sustainable Development Goals link to the utilization of the own research area.

Syllabus Umeå University, 901 87 Umeå Faculty of Science and Technology Doctoral Studies Committe www.umu.se/english



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## 3. Course Description

The course deals with approaches and tools for utilizing and/or commercializing research. Concepts such as utilization, innovation, commercialization and licensing are reviewed. Intangible assets, idea generation and prototyping are also discussed.

Various types of innovations and ways to utilize and/or commercialize ideas based on research results from different disciplines are presented. Particular emphasis will be given to identifying, assessing and evaluating ideas in the early stages of development based on the students own research. This shall also include sustainability costs and benefits linked to the UN Global Sustainable Development Goals (SDGs).

The course provides knowledge and guidance about the academic innovation support system available to researchers who wish to further develop their ideas for utilization or commersialization in the surrounding community and/or in business.

## 4. Form of instruction

The course is given in the form of seminars, lectures, workshops and is based on active participation.

## 5. Examination modes

The final examination will be in the form of an written individual report that is presented orally.

## 6. Other regulation

Credit counts are individually given tested by the Phd-students respective examiner.

## 7. Literature

Literature will be listed within the following areas, and mainly consist of articles:

- 1. Innovation and entrepreneurship, including e.g. social innovation.
- 2. Tools for developing ideas, such as Business Model Canvas and NABC.
- 3. Intellectual property rights and licensing.

Additional articles and/or other material may be used during the seminars.